CLAIMS:

What is claimed is:

1. A method for monitoring and controlling a device using only one input/output (I/O) communication pin of said device, said method comprising:

configuring said I/O pin to be used to transmit and receive data;

generating logical ones using pulses that are a first length and generating logical zeros pulses that are a second length; and

communicating with said device utilizing said generated logical ones and generated logical zeros by transmitting said logical ones and zeros to said device utilizing said I/O pin.

The method according to claim 1, further comprising the steps of:

configuring said I/O pin by connecting said I/O pin to a first node of a pull-up resistor and connecting a second node of said pull-up resistor to a power source; and

said I/O pin being configured as an open collector output that will serve as both an input pin and an output pin.

3. The method according to claim 1, further comprising the steps of:

generating said logical ones and logical zeros using an external device that is coupled to said device using said I/O pin.

4. The method according to claim 3, further comprising the steps of:

connecting a first node of a second resistor included within said external device to a power source;

connecting a second node of said second resistor to a first node of an LED;

connecting a second node of said LED to a first communication pin of said external device;

connecting said second node of said LED to a first node of a switch; and

connecting a second node of said switch to ground.

5. The method according to claim 4, further comprising the steps of:

connecting said first communication pin of said external device to said I/O pin of said device; and generating said logical ones and logical zeros by opening and closing said switch.

6. The method according to claim 5, further comprising the steps of:

generating a bit stream by repeatedly opening and closing said switch to generate said logical ones and said logical zeros;

generating said logical ones by closing said switch for a first length of time; and

generating said logical zeros by closing said switch for a second length of time.

7. The method according to claim 5, further comprising the steps of:

connecting said first communication pin of said external device to said I/O pin of said device; and

receiving, by said first communication pin of said external device, data transmitted by device utilizing said I/O communication pin; and

outputting said data using said LED.

8. The method according to claim 3, further comprising the steps of:

connecting a first node of a bi-directional driver that is included in said external device to a first communication pin of said external device; and

connecting said first communication pin to said I/O pin of said device.

9. The method according to claim 8, further comprising: generating said logical ones and said logical zeros by said external device and outputting said logical ones and said logical zeros using said first communication pin.

10. A system for monitoring and controlling a device using only one input/output (I/O) communication pin of said device, said system comprising:

said I/O pin being configured to both transmit and receive data;

said I/O pin for receiving and transmitting logical ones that are pulses that are a first length and logical zeros that are pulses that are a second length; and

said I/O pin for communicating with said device utilizing said generated logical ones and generated logical zeros by transmitting said logical ones and zeros to said device utilizing said I/O pin.

11. The system according to claim 10, further comprising:

said I/O pin being configured by connecting said I/O pin to a first node of a pull-up resistor and connecting a second node of said pull-up resistor to a power source; and

said I/O pin being configured as an open collector output that will serve as both an input pin and an output pin.

12. The system according to claim 10, further comprising:

said logical ones and logical zeros being generated using an external device that is coupled to said device using said I/O pin.

- 13. The system according to claim 12, further comprising:
- a first node of a second resistor included within said external device connected to a power source;
- a second node of said second resistor connected to a first node of an LED;
- a second node of said LED connected to a first communication pin of said external device;

said second node of said LED connected to a first node of a switch; and

a second node of said switch connected to ground.

14. The system according to claim 13, further comprising:

said first communication pin of said external device connected to said I/O pin of said device; and

said logical ones and logical zeros being generated by opening and closing said switch.

15. The system according to claim 14, further comprising:

a bit stream generated by repeatedly opening and closing said switch to generate said logical ones and said logical zeros;

said logical ones generated by closing said switch for a first length of time; and

said logical zeros generated by closing said switch for a second length of time.

16. The system according to claim 14, further comprising:

said first communication pin of said external device connected to said I/O pin of said device; and

said first communication pin of said external device for receiving data transmitted by device utilizing said I/O communication pin; and

said LED for outputting said data.

17. The system according to claim 12, further comprising:

a first node of a bi-directional driver that is included in said external device connected to a first communication pin of said external device; and

said first communication pin connected to said I/O pin of said device.

- 18. The system according to claim 17, further:
 said logical ones and said logical zeros generated
 by said external device and outputting said logical ones
 and said logical zeros using said first communication
 pin.
- 19. A computer program product for monitoring and controlling a device using only one input/output (I/O) communication pin of said device, said product comprising:

instructions for configuring said I/O pin to be used to transmit and receive data;

instructions for generating logical ones using pulses that are a first length and generating logical zeros pulses that are a second length; and

instructions for communicating with said device utilizing said generated logical ones and generated logical zeros by transmitting said logical ones and zeros to said device utilizing said I/O pin.

20. The product according to claim 19, further comprising:

instructions for generating a bit stream by repeatedly opening and closing a switch that is external to said device and connected to said I/O pin to generate said logical ones and said logical zeros;

instructions for generating said logical ones by closing said switch for a first length of time; and

instructions for generating said logical zeros by closing said switch for a second length of time.